

CLAIMS

What is claimed is:

1. A method for a digital computer of providing system configuration information to applications, comprising:
 - booting a service environment prior to running an operating system;
 - retrieving a list of available devices to test;
 - enumerating the system configuration information from a plurality of platform tables; and
 - storing the system configuration information in memory.
2. The method of claim 1, wherein the service environment provides an interface between the operating system and the platform firmware.
3. The method of claim 1, wherein the service environment is an Extensible Firmware Interface.
4. The method of claim 1, further comprising applying a diagnostic test using the stored system configuration information.
5. The method of claim 1, further comprising displaying the stored system configuration information.
6. The method of claim 1, further comprising auto-configuring a test suite using the stored system configuration information.

7. The method of claim 6, further comprising running an operating system.
8. A system comprising:
- a diagnostic console;
 - a test control coupled to a diagnostic console, wherein the test control retrieves the list of available devices to test;
 - a configuration proxy coupled to the test control, wherein the configuration proxy provides an abstract object interface to configuration information sources;
 - a plurality of firmware table drivers coupled to the configuration proxy; and
 - a plurality of firmware tables coupled to the plurality of firmware table drivers.
9. The system of claim 8, wherein the plurality of firmware tables comprise:
- an Advanced Configuration and Power Interface table;
 - a System Management Basic Input/Output System table; and
 - an Intelligent Platform Management Interface table.
10. The system of claim 9, wherein the plurality of firmware tables further comprise a Peripheral Component Interconnect driver.
11. The system of claim 8, wherein the configuration proxy comprises:
- an interface library;
 - a set of executable code; and

a memory array.

12. The system of claim 11, wherein the memory array comprises:

a working storage unit, wherein the working storage unit stores the discovered system configuration; and

a persistent storage unit, wherein the persistent storage unit stores the pre-configured data.

13. The system of claim 8, wherein each of the plurality of firmware tables is coupled to an individual firmware table driver.

14. An article comprising a machine readable medium having a plurality of machine readable instructions, wherein when the instructions are executed by a processor, the instructions cause a system to:

discover firmware tables at a pre-boot service environment;

present platform device information through a plurality of object interfaces during the pre-boot service environment; and

use the platform device information to configure diagnostic test suites.

15. The article of claim 14, comprising a machine readable medium having a plurality of machine readable instructions, wherein when the instructions are executed by a processor, the instructions further cause a system to:

provide end users with a plurality of diagnostic tests; and

make the plurality of diagnostic tests available to execute.

16. An apparatus comprising:
- means for obtaining system configuration information in a pre-boot service environment;
 - means for storing configuration data; and
 - means for providing an interface to manage the stored configuration data.
17. The apparatus of claim 16 further comprising a means for retrieving the configuration information in a plain text format.
18. The apparatus of claim 16 further comprising a means for using configuration data to auto-configure diagnostic test suites.
19. The apparatus of claim 16 further comprising a means for retrieving the configuration information in an object table format.
20. A method of identifying unresponsive installed devices of a system, comprising the steps of:
- storing pre-configured data in the persistent storage;
 - discovering the system configuration;
 - storing the discovered system configuration data in the working storage;
 - comparing the data in the persistent storage with the data in the working storage.
21. The method of claim 20, wherein the step of storing pre-configured data stores the expected system configuration.

22. The method of claim 20, wherein the step of storing pre-configured data is performed during an operational mode prior to booting the system, wherein the data is converted from a table format to a file format.